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**STATEMENT UNDER 37 CFR 3.73(b)**

Alexander Steinbüchel,

Applicant/Patent Owner: Mathias Liebergesell, Henry Valentin, and Andreas Pries

Application No./Patent No.: 09/779,427 Filed/Issue Date: February 8, 2001

Entitled: Methods Of Producing Poly(Hydroxy) Fatty Acids In Bacteria

Metabolix, Inc. a corporation of the State of Delaware

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

- the assignee of the entire right, title, and interest; or
- an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

In the patent application/patent identified above by virtue of either:

A.  An assignment from the Inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B.  A chain of title from the Inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From BUCK-Werke GmbH & Co. as proprietor of German priority application no. 44 33 134.7 to Monsanto Company, a copy of which is attached.

2. From Dr. Andreas Pries as co-inventor and proprietor of foreign filing right of German priority application no. 44 33 134.7 to Monsanto Company, a copy of which is attached.

3. From: Monsanto Company To: Metabolix, Inc.

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

DECEMBER 3 2002

Date

OLIVER P. PEOPLES

Typed or printed name

Oliver P. Peoples

Signature

VPR & D

Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

(File:UEB1BU29255.doc. 27.12.1995  
 Agreement BUCK/MONSANTO  
 P4431134.7//PCT/DE95/01279



Assignment Agreement  
 between BUCK and MONSANTO

5

preamble

10 BUCK-Werke GmbH & Co., Geislinger Str. 21, D-73337 Bad Überkingen (hereinafter BUCK) are the proprietors of the German patent application No. P 44 33 134.7 having the title "Verfahren zur Herstellung von Polyhydroxyfettsäuren sowie rekombinanter Bakterienstämme zur Durchführung des Verfahrens" (Method for producing polyhydroxyfatty acids as well as recombinant bacterial strains for executing the method) (hereinafter DE-BUCK), filed with the German Patent Office on September 16, 1994. BUCK is further in possession of the right to claim priority based upon the DE-BUCK.

20 BUCK have assigned their right to file foreign applications to an employed inventor, namely Dr. Andreas Pries, with their declaration of release dated June 6, 1995.

25 BUCK wishes to assign their rights in the above application to the MONSANTO COMPANY, 800 North Lindberg Boulevard, St. Louis, Missouri 63167, U.S.A. (hereinafter MONSANTO).

MONSANTO wishes to acquire the rights in DE-BUCK from BUCK.

30

1. Assignment of DE-BUCK

1. BUCK herewith assigns DE-BUCK to MONSANTO which herewith accepts the assignment.

35 2. BUCK will make all declarations necessary for the transfer of DE-BUCK to MONSANTO.

[File:UEB\BU29255.doc. 27.12.1995  
Agreement BUCK/MONSANTO  
P4433134.7/PCT/DE95/01279]



3. BUCK herewith surrenders any right to use the subject matter of DE-BUCK inside as well as outside the country. In particular, BUCK will not claim any right of prior use vis-  
5 à-vis MONSANTO within the meaning of Section 12 (1) German Patent Act (PatG).

The official and attorney's fees of the assignment shall be borne by MONSANTO.

10 2. Assignment of the Priority Right Arising from DE-BUCK

BUCK herewith undertakes to assign the invention and the priority right from the DE-BUCK to MONSANTO. This 15 assignment will be regulated in a separate declaration of transfer to claim the right of priority (Annex A).

20 3. Declaration of Release for deposited Microorganisms

BUCK deposited the following microorganisms in the course 25 of DE-BUCK

Pseudomonas putida SK 6691  
Alcaligenes eutrophus SK6891

at the DSM in Braunschweig on Sept. 5, 1994 in accordance with the Budapest Treaty on the Acknowledgement of Deposit of Microorganisms for Patent Procedures in order to fulfil 30 the requirements of patent law made to the enabling of the invention on which DE-BUCK is based.

The Accession numbers which are mentioned in DE-BUCK are:

35 DSM 9417: Pseudomonas putida SK 6691  
DSM 9418: Alcaligenes eutrophus SK6891.

[File:UEBU29255.doc, 27.12.1995  
Agreement BUCK/MONSANTO  
P4433134.7//PCT/DE95/II1279]



BUCK will make a declaration (Annex B) vis-à-vis DSM to the effect that MONSANTO, on the commencement of this agreement, is allowed unrestricted and irrevocable access - 5 and explicitly also prior to publication of the DE-BUCK - to the above-identified deposited microorganisms whereby MONSANTO obtains possession of samples of the deposited microorganisms.

10 BUCK will make this declaration exclusively in favour of MONSANTO and not in favour of third parties.

15 BUCK undertakes upon request by MONSANTO to give a declaration vis-à-vis the depositary institution DSM that the deposits of the above designated microorganisms will be assigned to MONSANTO, and that accordingly, MONSANTO will replace BUCK's position as depositor. MONSANTO will accept this declaration.

20 3.1 Regarding the Present Situation of Foreign Applications

Both parties agree that presently the legal situation with respect to foreign applications claiming the priority of an earlier application for the purposes of which 25 microorganisms have been deposited, and wherein a first applicant - here BUCK - and a subsequent applicant - here MONSANTO - are not one and the same legal person, at least concerning applications according to the EPC, results in significant legal uncertainty. These disadvantages may lead 30 to entire loss of rights due to insufficient disclosure, as the European Patent Office presently requests that Depositor and Applicant must be as a matter of principle one and the same legal person.

35 Due to this unfavourable legal situation, both parties agree that foreign applications may be only filed commonly,

[File:UEBIBU29255.doc, 27.12.1995  
Agreement BUCK/MONSANTO  
P441114.7//PCT/DE95/01279]



i.e. filed by both, BUCK and MONSANTO, in order to avoid legal uncertainty for MONSANTO.

Furthermore, both parties agree that BUCK herewith just act 5 as a formal applicant. That means BUCK has neither rights nor obligations with regard to these applications -although BUCK is listed as a co-applicant of foreign applications, or PCT-applications, respectively. Additionally, BUCK will also not bear any costs occurring with respect to these 10 foreign applications.

BUCK undertakes to give optionally required signatures being in context with these foreign applications.

15 Moreover, both parties agree that MONSANTO is the sole legal person being authorized to dispose these foreign applications, i.e. there will be no need for rediscussion with BUCK for all decisions in context with these foreign applications.

20 Precautionarily, BUCK gives the following declaration concerning the redraft of Rule 28 EPC to be expected:

25 BUCK, in their capacity as Depositor of the deposited biological material of item 3 of the present agreement, herewith authorizes MONSANTO to make reference to the deposited biological material in their foreign applications, and gives without reservation and irrevocably 30 their consent that the biological material deposited by BUCK, will be made accessible to the public in accordance with Rule 28 EPC.

Anytime, MONSANTO is entitled to request an assignment of 35 MONSANTO/BUCK applications to MONSANTO. BUCK will agree to this assignment.

[File:UEB18U29255.doc, 27.12.1995  
Agreement BUCK/MONSANTO  
P4433134.7//PCT/DE95/11279]



#### 4. Financial Obligation of MONSANTO

MONSANTO undertakes to transfer the non-recurring net amount of US\$20,000 (twenty thousand US Dollars) 5 [hereinafter transfer amount] within ten days after signing of this Agreement by the last party to the agreement without deductions to the following account of BUCK:

Bank: Bayerische Vereinsbank Bad Reichenhall  
10 Bank Code No.: 710 200 72  
Account No.: 320 84 00

MONSANTO bears all bank fees necessary for this transfer.

15 MONSANTO furthermore undertakes to take over all costs for negotiating this Agreement by patent attorney Dr. Jürgen Kaiser, KUHNEN, WACKER & PARTNERS (hereinafter KWP), Alois-Steinecker-Str. 22, 85354 Freising, Germany. In this respect, KWP will separately invoice MONSANTO.

#### 5. Entering into Effect

Both parties agree that this Assignment Agreement enters 25 into effect only with the crediting of the above-specified account of BUCK with the full transfer amount, even in case if already foreign applications have been filed for preserving the priority term.

#### 6. Applicable Law and Place of Venue

30 German law shall be applied to this Agreement. For all disputes arising from this Agreement, the Landgericht München I (District Court Munich I) shall have jurisdiction.

35

[File:UEBU29255.doc. 27.12.1995  
Agreement BUCK/MONSANTO  
P4433134.7//PCT/DE95/01279]



### 7. Salvatorian Clause

Should any provision of this agreement be invalid or unenforceable or should the contract contain an omission, 5 the remaining provisions shall be valid. In the place of an invalid provision, a valid provision is presumed to be agreed upon by the parties, which comes economically closest to the one actually agreed upon; the same shall apply in the case of an omission.

10

### 8. Language of the Agreement

This Agreement has been made in the German and English languages. Both versions are equally binding. In cases of doubt, however, the German version shall be relevant.

15

On behalf of BUCK

Name Hartmut H. Buck Hans J. Witt  
Signature

Hartmut H. Buck  
Signature

Place Bad Überkingen  
Date 16.12.1995

On behalf of MONSANTO *R&F*

Hendrik A. Verfaillie  
Executive Vice President

Hans J. Witt  
Signature  
Place St. Louis, Missouri  
Date February 28, 1996

20 Annexes A and B

22.12.'95 12:23

ID:Kuhnen, Wacker u.Partner<sup>1</sup> FAX:+49---- 09.8161 930103 SEITE 5

[File:BRS\BU283.doc] 14.09.1995  
 Prioritätsrechtsübertragungserklärung



Anlage A:

### Prioritätsrechtsübertragungserklärung

Hiermit übertragen die BUCK-Werke GmbH & Co. Geislanger Str. 21, D-73337 Bad Überkingen ihr Prioritätsrecht aus der deutschen Patentanmeldung P 44 33 134.7 mit dem Titel "Verfahren zur Herstellung von Polyhydroxyfettsäuren sowie rekombinante Bakterienstämme zur Durchführung des Verfahrens", beim Deutschen Patentamt eingereicht am 16. September 1994 auf die MONSANTO COMPANY, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, USA.

Declaration of the assignment to claim the right of priority

The BUCK-Werke GmbH & Co., Geislanger Str. 21, D-73337 Bad Überkingen are transferring herewith their right of priority from the German patent application P 44 33 134.7 having the title "Verfahren zur Herstellung von Polyhydroxyfettsäuren sowie rekombinante Bakterienstämme zur Durchführung des Verfahrens", which was filed with the German Patent Office on September 16, 1994 to the MONSANTO COMPANY, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, USA.

Für die BUCK-Werke:

Bad Überkingen, 14.09.1995

Name: Hartmut H. Buck

Hans J. Wirtz

Unterschrift: Hartmut H. Buck

22.12.'95 12:22

ID:Kuhnen, Wacker u.Partner<sup>1</sup> FAX:+49-~~09-09~~ 8161 930103 SEITE 4

(PUE:BRS\BU293.dox) 14.09.1995  
Prioritätsrechtsübertragungsvereidigung



## Anlage B:

Hiermit erklären die BUCK-Werke, Geislinger Str. 21, D-73337 Bad Überkingen gegenüber der DSM, Braunschweig, daß mit in Kraft treten des Übertragungsvertrages zwischen BUCK und MONSANTO, die MONSANTO COMPANY, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, USA uneingeschränkt Zugriff auf die von BUCK hinterlegten Stämme unter den DSM-Zugriffszahlen 9417 und 9418 zu gewähren ist.

Darüberhinaus tritt nunmehr MONSANTO an die Stelle von BUCK bezüglich der hinterlegten Stämme DSM 9417 und DSM 9418.

BUCK-Werke, Geislinger Str. 21, D-73337 Bad Überkingen declares herewith before DSM, Braunschweig that - as soon as the assignment contract between BUCK and MONSANTO is effective - MONSANTO COMPANY, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167 has unrestricted access to the strains deposited by BUCK under the accession numbers 9417 and 9418.

Furthermore, MONSANTO takes over BUCK's position concerning the deposited strains DSM 9417 and DSM 9418.

Für BUCK:

Bad Überkingen, 14.09.1995

Name: Hartmut H. Buck

Hans J. Wirtz

Unterschrift:

[File:UEBIPR43011.doc, Translation of Assignment Agreement 04.09.1995  
P4433134.7, Mikrobielle Biopolymere  
Dr. Pries, Andreas, Bad Reichenhall / MONSANTO]



*ORIGINAL*

Assignment Agreement

between Dr. Andreas PRIES and MONSANTO

5

Preamble

Dr. Andreas Pries, Nonnerstr. 4, 83435 Bad Reichenhall, Germany (hereinafter PRIES) is stated as co-inventor in the 10 German patent application No. P 44 33 134.7 having the title "Verfahren zur Herstellung von Polyhydroxyfettsäuren sowie rekombinanter Bakterienstämme zur Durchführung des Verfahrens" (Method for producing polyhydroxyfatty acids as well as recombinant bacterial strains for carrying out the 15 method) (hereinafter DE-BUCK), filed with the German Patent Office on September 16, 1994. The proprietor of DE-BUCK is the BUCK-Werke GmbH & Co., Geislingerstr. 21, D-73337, Germany (hereinafter BUCK), of which PRIES is an employee. BUCK assigned the rights (hereinafter FOREIGN RIGHTS) for 20 filing foreign applications, which claim the priority of DE-BUCK, to PRIES with the Declaration of Release dated June 6, 1995. PRIES accepted this assignment with declaration dated June 14, 1995.

25 PRIES wishes to assign his FOREIGN RIGHTS to the MONSANTO COMPANY, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, U.S.A. (hereinafter MONSANTO).

MONSANTO wishes to acquire the FOREIGN RIGHTS from PRIES.

30

1. Assignment of the FOREIGN RIGHTS

PRIES herewith assigns the FOREIGN RIGHTS in the DE-BUCK to MONSANTO which herewith accepts the assignment.

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[File:UEBVR43011.doc. Translation of Assignment Agreement 04.09.1995  
P4433134.7, Mikrobielle Biopolymere  
Dr. Pries, Andreas, Bad Reichenhall / MONSANTO]



MONSANTO will thus be entitled to file foreign applications in countries of its choice in its own name. In particular, MONSANTO will be entitled to file an application pursuant to the Patent Cooperation Treaty (PCT).

5 PRIES surrenders any rights to use the subject matter applied for in countries in which MONSANTO filed applications or in countries which were designated in a possible PCT application. This shall also apply mutatis mutandis to regional patent areas such as, for example, the countries united in the European Patent Convention (EPC).

10 15 Both parties agree that such foreign applications may at present only be filed as joint applications by MONSANTO and BUCK for reasons of legal certainty for MONSANTO, however, without any rights or obligations for BUCK.

20 All parties involved agreed upon filing a PCT-application with the German Patent Office, official file number PCT/DE95/01279 (Annex I), on 15.09.1995 in order to meet the priority term.

The costs of such foreign applications shall be borne by MONSANTO.

25 2. Re-assignment of the Priority Right Arising from DE-BUCK

30 PRIES affirms that he re-assigned the priority right from the DE-BUCK to BUCK. BUCK will make a declaration of assignment of the priority right in a separate agreement in favour of MONSANTO.

3. Necessary Signatures and Cooperation

35 PRIES undertakes to give the necessary signatures for all foreign applications, e.g. for the United States of

[File:UEB1PR43011.doc. Translation of Assignment Agreement 04.09.1995  
P4433134.7. Mikrobielle Biopolymere  
Dr. Pries, Andreas, Bad Reichenhall / MONSANTO]



America. PRIES further arranged that the co-inventors also undertake to give the necessary signatures (Annex II).

PRIES further undertakes, in the case of technical questions as might arise in the course of the individual national granting procedures and/or in the course of the international preliminary examination or in any other procedure related to the subject matter of this foreign application, to make his knowledge concerning his invention available to MONSANTO and/or representatives thereof to the best of his knowledge for the purpose of these procedures.

#### 4. Financial Obligation of MONSANTO

MONSANTO undertakes to transfer the non-recurring net amount of US\$60,000 (sixty thousand US Dollars) (hereinafter transfer amount) within ten days after signing of this Agreement by the last party to the agreement without deductions to the following account of PRIES:

Bank: Sparkasse Berchtesgadener Land  
Bank Code No.: 71050000  
Account No.: 5088943

MONSANTO shall bear all bank fees necessary for this transfer.

MONSANTO furthermore undertakes to take over all costs for negotiating this Agreement by patent attorney Dr. Jürgen Kaiser, KUHNEN, WACKER & PARTNERS (hereinafter KWP), Alois-Steinecker-Str. 22, 85354 Freising, Germany. In this respect, KWP will separately invoice MONSANTO.

MONSANTO furthermore undertakes to observe secrecy vis-à-vis third parties in respect of the transfer amount.

[File:UEB\PR43011.doc, Translation of Assignment Agreement 04.09.1995  
 PA433134.7, Mikrobielle Biopolymere  
 Dr. Pries, Andreas, Bad Reichenhall / MONSANTO]



### 5. Entering into Effect

Both parties agree that this Assignment Agreement enters into effect only with the crediting of the above-specified

5 account of PRIES with the full transfer amount.

### 6. Applicable Law and Place of Venue

German law shall be applied to this Agreement. For all  
 10 disputes arising from this Agreement, the Landgericht München I (District Court Munich I) shall have jurisdiction.

### 7. Salvatorian Clause

15 Should any provision of this agreement be invalid or unenforceable or should the contract contain an omission, the remaining provisions shall be valid. In the place of an invalid provision, a valid provision is presumed to be  
 20 agreed upon by the parties, which comes economically closest to the one actually agreed upon; the same shall apply in the case of an omission.

### 8. Language of the Agreement

25 This Agreement has been made in the German and English languages. Both versions are equally binding. In cases of doubt, however, the German version shall be relevant.

30

On behalf of MONSANTO *RA*

Dr. Andreas Pries

Name Hendrik A. Verfaillie  
 Executive Vice President

35 Signature

*Andreas Pries*

Signature

*Hendrik A. Verfaillie*

*VVP*

[File:UEB\PR43011.doc, Translation of Assignment Agreement 04.09.1995  
P4433134.7. Mikrobielle Biopolymere  
Dr. Pries, Andreas, Bad Reichenhall / MONSANTO]



place *Bad Reichenhall*

place St. Louis, Missouri

Date 29. 12. 1995

Date February 28, 1996

5

Annexes I and II

19-DEZ-1995 18:08

BUCK WERKE GMBH &amp; CO

+49 8651 70370 5.02

[PCT-BRAKAPR42012 doc] 19.12.95  
Makromoleküle Blockcopolymeren  
PCT/D/DE95/01279

Anlage IIAnnex IIERKLÄRUNGDECLARATION

Ich, Prof. Dr. Alexander Steinbüchel, erkläre hiermit, daß ich sämtliche für Auslandsanmeldungen erforderliche Unterschriften, welche auf der PCT-Anmeldung PCT/DE95/01279 basieren, leisten werde.

Mit dieser Unterschrift entstehen für mich keinerlei Verpflichtungen, und ich werde keinerlei Ansprüche gegen den oder die Anmelder geltend machen.

Diese Erklärung ist in deutsch und englisch abgefaßt. Beide Fassungen sind gleichermaßen verbindlich.

I, Prof. Dr. Alexander Steinbüchel, declare herewith that I will give all necessary signatures for foreign applications, which are based on the PCT-application PCT/DE95/01279.

There will not result any obligations for me from my signature, and I will not assert any claims against the applicant.

The present Declaration has been drafted in German and English. Both versions are equally binding.

*Hinrichs*  
*Cottbus, den 19.12.1995*

*P. K. L.*  
Prof. Dr. Alexander Steinbüchel

19-DEZ-1995 18:11

BUCK WERKE GMBH &amp; CO

+49 8651 70370 5.02

(F000RAKAVPR43012.doc) 10.12.95  
Biodegradeable Biopolymers  
PCT/DE95/01279

Anlage IIAnholt IIERKLÄRUNG

Ich, Dr. Matthias Liebergesell, erkläre hiermit, daß ich sämtliche für Auslandsanmeldungen erforderliche Unterschriften, welche auf der PCT-Anmeldung PCT/DE95/01279 basieren, leisten werde.

Mit dieser Unterschrift entstehen für mich keinerlei Verpflichtungen, und ich werde keinerlei Ansprüche gegen den oder die Anmelder geltend machen.

Diese Erklärung ist in deutsch und englisch abgestellt. Beide Fassungen sind gleichermassen verbindlich.

DECLARATION

I, Dr. Matthias Liebergesell, declare herewith that I will give all necessary signatures for foreign applications, which are based on the PCT application PCT/DE95/01279.

There will not result any obligations for me from my signature, and I will not assert any claims against the applicant.

The present Declaration has been drafted in German and English. Both versions are equally binding.

*Rumtsche*  
*Cettingen, den 20.12.95*

*J. Kell*  
Dr. Matthias Liebergesell

19-DE-1995 15:17

BUCH NEPFE SCHM . 10

+49 8161 930100 6.02.02

[FILE:BRANIPR43012.doc] 19.12.95  
 Molekularin Biopolymere  
 PCT/DE95/01279

Au/oje IIAu/ex IIERKLÄRUNGDECLARATION

Ich, Dr. Henry Valentin, erkläre hiermit, daß ich sämtliche für Auslandsanmeldungen erforderliche Unterschriften, welche auf der PCT-Anmeldung PCT/DE95/01279 basieren, leisten werde.

Mit dieser Unterschrift entstehen für mich keinerlei Verpflichtungen, und ich werde keinerlei Ansprüche gegen den oder die Anmelder geltend machen.

Diese Erklärung ist in deutsch und englisch abgefaßt. Beide Fassungen sind gleichermaßen verbindlich.

I, Dr. Henry Valentin, declare herewith that I will give all necessary signatures for foreign applications, which are based on the PCT application PCT/DE95/01279.

There will not result any obligations for me from my signature, and I will not assert any claims against the applicant.

The present Declaration has been drafted in German and English. Both versions are equally binding.

Harrisonburg  
Göttingen, den 19 Dezember 1995

Henry Valentin  
Dr. Henry Valentin

## **PATENT ASSIGNMENT**

**THIS PATENT ASSIGNMENT ("Assignment")** is made and entered into as of this 14th day of May, 2001, by and between Metabolix, Inc., a Delaware corporation, having its principal place of business located at 303 Third Street, Cambridge, Massachusetts 02142 (hereinafter "Assignee"), and Monsanto Company, a Delaware corporation, having its principal place of business located at 800 North Lindbergh Boulevard, St. Louis, Missouri 63167 (hereinafter "Assignor").

**WHEREAS**, except as otherwise indicated, Assignor owns or has owned the patents and patent applications identified on Schedule A and Schedule B, attached hereto, some of which have lapsed or have been abandoned;

**WHEREAS**, Assignee acknowledges that some of the patents and patent applications listed on Schedule A and Schedule B have been abandoned or have lapsed; and

**WHEREAS**, Assignor and Assignee are parties to the Transaction Documents (as defined in a certain Asset Purchase Agreement of even date herewith entered into by the parties hereto) which provides for, among other things, the assignment of the identified patents and patent applications from Assignor to Assignee.

**NOW, THEREFORE**, in consideration of the mutual covenants and obligations contained herein and in the Transaction Documents, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

Assignor does hereby sell, assign, transfer, and set over unto said Assignee all of its right, title, and interest in and to the inventions described and/or claimed in, and the patents and patent applications relating to polyhydroxyalkanoates ("PHAs") identified on Schedule A and Schedule B, and any reissues or reexaminations thereof, and any continuing, continuation, continuation-in-part, divisional, foreign counterpart, and/or Patent Cooperation Treaty applications which may be hereinafter filed, and in and to any Letters Patent which may be granted and issued, in and for the United States of America and all foreign countries, including all treaty and convention rights, and the right to sue for present, past, and future infringement, enforce any rights and file any causes of action related thereto, either in law or equity, and to all income, royalties, fees, damages, and payments now or hereafter due or payable with respect thereto (hereinafter "Patents"). The identified Patents shall be held and enjoyed by said Assignee, its successors and assigns, to the fullest extent permissible under any applicable laws and ends of the terms for which all Letters Patents therefor may be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this Assignment had not been made.

Assignee is hereby authorized to make application for and to receive Letters Patent for said inventions in any countries at its election. And by this covenant the Assignor agrees to execute or procure further necessary assurance of title to said inventions, patents and patent applications, and at any time, upon the reasonable request and at the expense of said Assignee, will execute and deliver any and all papers that may be necessary or desirable to

perfect the title to said inventions, patents and patent applications in Assignee, its successors, assigns or other legal representatives; and upon the reasonable request of said Assignee, will execute any additional applications for patents for said inventions, or any part or parts thereof, and for the reissue of any Letters Patent to be granted therefor; and will make all rightful oaths and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of said Assignee, its successors, assigns, or other legal representatives.

Notwithstanding the foregoing, Assignee shall prepare, execute and deliver any and all documents related to the recordation or legalization of any rights granted herein. And, as between the parties hereto, Assignee shall be solely obligated and responsible for any and all expenses associated with such recordation or legalization, including without limitation any preparation, execution and delivery expenses, and shall further be obligated and responsible for any expenses incurred in Assignee's efforts to obtain, establish or perfect ownership of right, title or interest in or to the Patents. Assignee agrees that it shall not record this Assignment in or with the United States Patent and Trademark Office or in or with any patent office foreign to the country of the United States of America. The assignment on Schedule C attached hereto serves as an exemplary form of instrument for recording purposes.

**MONSANTO COMPANY**  
800 North Lindbergh Boulevard  
St. Louis, Missouri 63167

Attest:

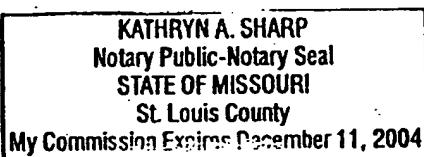
Wilkely L. Wesley

STATE OF MISSOURI )  
                        ) ss.:  
COUNTY OF ST. LOUIS )

On this 14<sup>th</sup> day of May, 2001, before me personally came Dana L. Wesley, to me personally known, who being duly sworn did say that he is the Director, M+A of Monsanto Company, that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors; and said Dana L. Wesley acknowledged said instrument to be the free act and deed of said corporation.

Kathryn A. Sharp  
(Notary Public)

My commission expires \_\_\_\_\_



*Signature page to the Patent Assignment dated May 14, 2001*

METABOLIX, INC.  
303 Third Street  
Cambridge, Massachusetts 02142

Attest:

By: James J. Barber  
Name: JAMES J. BARBER  
Title: PRESIDENT

STATE OF MASSACHUSETTS )  
                            ) ss.:  
COUNTY OF MIDDLESEX     )

On this 21<sup>st</sup> day of May, 2001, before me personally came James J. Barber, to me personally known, who being duly sworn did say that he is the President and CEO of Metabolix, Inc., that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors; and said James J. Barber acknowledged said instrument to be the free act and deed of said corporation.

MY COMMISSION EXPIRES  
JANUARY 24, 2008

Dave T. Scott

Notary Public

My commission expires \_\_\_\_\_

*Signature page to the Patent Assignment dated May 14, 2001*

**SCHEDULE A to the Patent Assignment**

**Patents and Patent Applications**

1. Title: **METHODS OF PHA EXTRACTION AND RECOVERY  
USING NON-HALOGENATED SOLVENTS**

Inventor(s): **Kurdikar, et al.**  
U.S. Patent No.: **6,043,063**  
Issued: **March 28, 2000**  
Serial No.: **09/060,121**  
Filed: **April 15, 1997**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 4/14/98          | US9807484       | 10/22/98         | WO9846782       | Filed         |
| EP                  | 4/14/98          | US9807484       | 2/2/00           | 09757588        | Pending       |

2. Title: **DNA SEQUENCE USEFUL FOR THE PRODUCTION OF  
POLYHYDROXYALKANOATES**

Inventor(s): **Kruger, et al.**  
U.S. Patent No.: **5,750,848**  
Issued: **May 12, 1998**  
Serial No.: **08/700,576**  
Filed: **August 13, 1996**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| US (reissue appln.) | 5/12/00          | 09/570842       |                  |                 | Pending       |
| WO                  | 8/13/97          | US9714388       | 2/19/98          | WO9806854       | Filed         |
| EP                  | 8/13/97          | 979372737       |                  |                 | Pending       |
| JP                  | 8/13/97          | 51005798        | 12/19/00         | KOHYO200051681  | Pending       |

3. Title: **HIGH TEMPERATURE PHA EXTRACTION USING  
PHA-POOR SOLVENTS**

Inventor(s): **Kurdikar, et al.**  
U.S. Patent No.: **6,087,471**  
Issued: **July 11, 2000**  
Serial No.: **09/060,120**  
Filed: **April 14, 1998**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 4/14/98          | US9807658       | 10/22/98         | WO9846783       | Filed         |
| EP                  | 4/14/98          | 989156054       | 1/26/00          | EPO973930       | Pending       |

4. Title: **RHODOSPIRILLUM RUBRUM  
POLY- $\beta$ -HYDROXYALKANOATE SYNTHASE**  
Inventor(s): **Clemente, et al.**  
U.S. Patent No.: **5,849,894**  
Issued: **December 15, 1998**  
Serial No.: **08/756,317**  
Filed: **November 25, 1996**  
Priority: **November 29, 1995**

5. Title: **MACROMOLECULAR DEGRADATION OF NUCLEIC  
ACIDS**  
Inventor(s): **Greer**  
U.S. Patent No.: **5,627,276**  
Issued: **May 6, 1997**  
Serial No.: **08/424,458**  
Filed: **October 27, 1993**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 10/27/93         | GB9302208       | 5/11/1994        | WO9410289       | Filed         |
| EP                  | 10/27/93         | 939236246       | 9/6/95           | 0669970         | Filed         |
| AU                  | 10/27/93         | 6280194         | 1/31/97          | 676026          | Lapsed        |
| BE                  | 10/27/93         | 939236246       | 9/6/95           | 0669970         | Issued        |
| BR                  | 10/27/93         | PI93073216      |                  |                 | Aband.        |
| CA                  | 10/27/93         | 2146455         | 5/11/94          |                 | Pending       |
| DE                  | 10/27/93         | 939236246       | 9/6/95           | 0669970         | Issued        |
| FI                  | 10/27/93         | 951997          |                  |                 | Pending       |
| FR                  | 10/27/93         | 939236246       | 9/6/95           | 0669970         | Issued        |
| GB                  | 10/27/93         | 92225614        |                  |                 | Aband.        |
| GB                  | 10/27/93         | 939236246       | 9/6/95           | 0669970         | Issued        |
| IT                  | 10/27/93         | 939236246       | 9/6/95           | 0669970         | Issued        |
| JP                  | 10/27/93         | 51081994        | 3/19/96          | OP50241596      | Pending       |
| NO                  | 10/27/93         | 951595          |                  |                 | Aband.        |

6. Title: **POLYESTER COMPOSITION AND OLIGOMERS USEFUL  
AS COMPONENTS THEREOF-POLYMER**  
Inventor(s): **Hammond, et al.**  
U.S. Patent No.: **5,550,173**  
Issued: **August 27, 1996**  
Serial No.: **08/432,116**  
Filed: **November 4, 1993**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 11/4/93          | GB9302279       | 5/26/94          | WO9411445       | Filed         |
| EP                  | 11/4/93          | 939247045       | 8/30/95          | 0668893         | Aband.AU      |
|                     | 11/4/93          | 6396294         | 12/18/97         | 684499          | Lapsed        |
| CA                  | 11/4/93          | 2147982         | 5/26/94          |                 | Pending       |
| FI                  | 11/4/93          | 952163          |                  |                 | Pending       |
| GB                  | 11/6/92          | 92233501        |                  |                 | Aband.        |
| JP                  | 11/4/93          | 51182794        | 4/23/96          | OP50372396      | Pending       |
| NO                  | 11/4/93          | 19951749        |                  |                 | Aband.        |

7. Title: **PROCESS FOR PREPARING FILMS AND COATINGS**

Inventor(s): **Waddington**  
 U.S. Patent No.: **6,111,006**  
 Issued: **August 29, 2000**  
 Serial No.: **08/663,088**  
 Filed: **July 7, 1997**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 12/19/94         | GB9402761       | 6/29/95          | WO9517454       | Filed         |
| EP                  | 12/19/94         | 959038514       | 12/11/96         | 0746585         | Filed         |
| BE                  | 12/19/94         | 959038514       | 12/11/96         | 0746585         | Issued        |
| CA                  | 12/19/94         | 2179522         | 6/29/95          |                 | Pending       |
| DE                  | 12/19/94         | 959038514       | 12/11/96         | 0746585         | Issued        |
| FR                  | 12/19/94         | 959038514       | 12/11/96         | 0746585         | Issued        |
| GB                  | 12/20/93         | 93259521        |                  |                 | Aband.        |
| GB                  | 12/19/94         | 959038514       | 12/11/96         | 0746585         | Issued        |
| IT                  | 12/19/94         | 959038514       | 12/11/96         | 0746585         | Issued        |
| JP                  | 12/19/94         | 51725695        | 7/29/97          | OP50744197      | Pending       |

8. Title: **3-HYDROXYBUTYRATE POLYMERS**

Inventor(s): **Collins, et al.**  
 U.S. Patent No.: **4,477,654**  
 Issued: **October 16, 1984**  
 Serial No.: **June 29, 1982**  
 Filed: **November 9, 1981**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  |                  | 813051869       | 5/26/82          | 0052459         | Filed         |
| BE                  | 10/30/81         | 813051869       | 5/26/82          | 0052459         | Issued        |
| CH                  | 10/30/81         | 813051869       | 5/26/82          | 0052459         | Lapsed        |
| DE                  | 10/30/81         | 813051869       | 5/26/82          | 0052459         | Issued        |
| FR                  | 10/30/81         | 813051869       | 5/26/82          | 0052459         | Issued        |
| GB                  | 10/30/81         | 813051869       | 5/26/82          | 0052459         | Issued        |

|    |          |           |          |           |        |
|----|----------|-----------|----------|-----------|--------|
| IT | 10/30/81 | 813051869 | 5/26/82  | 0052459   | Aband. |
| JP | 11/18/81 | 18515381  | 3/2/94   | 1560494   | Issued |
| JP | 11/18/81 | 27883890  | 11/10/92 | 7034292   | Issued |
| JP | 11/18/81 | 33224391  | 1/26/93  | OP1538393 | Issued |
| NL | 10/30/81 | 813051869 | 05/26/82 | 0052459   | Lapsed |
| RU | 11/17/81 | 335714505 |          |           | Lapsed |
| SE | 10/30/81 | 813051869 | 05/26/82 | 0052459   | Lapsed |
| UA | 10/28/93 |           |          |           | Lapsed |

9. Title: **3-HYDROXYBUTYRATE POLYMER COMPOSITION**

Inventor(s): **Herring, et al.**  
U.S. Patent No.: **5,061,743**  
Issued: **October 29, 1991**  
Serial No.: **07/530,560**  
Filed: **May 30, 1990**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  |                  | 903055028       | 12/5/90          | 0400855         | Filed         |
| AT                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| BE                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Issued        |
| BR                  | 5/30/90          | PI9002561       |                  |                 | Aband.        |
| CA                  | 5/30/90          | 2017885         | 11/30/90         |                 | Issued        |
| CH                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| DE                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Issued        |
| DK                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| ES                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| FR                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Issued        |
| GB                  | 5/30/89          | 89123889        |                  |                 | Aband.        |
| GB                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Issued        |
| GR                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| IN                  | 5/25/90          | 507DEL90        |                  | 177061          | Lapsed        |
| IT                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Issued        |
| JP                  | 5/30/90          | 14124790        | 2/19/99          | 2888924         | Issued        |
| KR                  | 5/30/90          | 781490          |                  |                 | Lapsed        |
| LU                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| MW                  | 5/30/89          | 4690            |                  |                 | Lapsed        |
| NL                  | 5/21/90          | 903055028       | 12/5/90          | 0400855         | Lapsed        |
| SE                  | 5/21/90          | 903055028       | 12/5/90          | 040855          | Lapsed        |
| SZ                  | 6/3/91           | RP281991        |                  |                 | Lapsed        |
| TW                  | 5/31/90          | 79104435        | 4/1/91           |                 | Lapsed        |
| ZA                  | 5/28/90          | 904073          |                  |                 | Lapsed        |
| ZW                  | 5/28/90          | 8390            |                  |                 | Lapsed        |

10. Title: **COPOLYMER PRODUCTION**  
 Inventor(s): **Byrom**  
 U.S. Patent No.: **5,364,778**  
 Issued: **November 15, 1994**  
 Serial No.: **08/103,155**  
 Filed: **December 10, 1990**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  |                  | 903131332       | 6/12/91          | 0431833         | Filed         |
| AU                  | 12/7/90          | 6782790         | 6/3/93           | 637657          | Issued        |
| BE                  | 12/4/90          | 903131332       | 6/12/91          | 0431833         | Issued        |
| BR                  | 12/7/90          | PI90062310      | 8/18/98          |                 | Issued        |
| CA                  | 12/10/90         | 2031888         | 6/9/91           |                 | Issued        |
| DE                  | 12/4/90          | 903131332       | 6/12/91          | 0431833         | Issued        |
| FR                  | 12/4/90          | 903131332       | 6/12/91          | 0431833         | Issued        |
| GB                  | 12/8/89          | 89277941        |                  |                 | Aband.        |
| GB                  | 12/4/90          | 903131332       | 6/12/91          | 0431833         | Issued        |
| IN                  | 12/6/90          | 1235DEL90       |                  | 177461          | Aband.        |
| JP                  | 12/7/90          | 40094790        | 2/25/00          | 3036851         | Issued        |
| KR                  | 12/8/90          | 2017590         | 7/9/99           | 223341          | Issued        |
| NZ                  | 12/7/90          | 236394          | 8/23/93          | 236394          | Issued        |
| TW                  | 12/12/90         | 79110458        | 1/12/93          | NI58448         | Issued        |
| ZA                  | 12/6/90          | 909816          | 11/27/91         | 909816          | Issued        |

11. Title: **BIODEGRADABLE POLYESTER PLASTICIZER**  
 Inventor(s): **Montador, et al.**  
 U.S. Patent No.: **5,516,825**  
 Issued: **May 14, 1996**  
 Serial No.: **08/381,903**  
 Filed: **August 10, 1993**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 8/10/93          | GB9301689       | 3/3/94           | WO9404607       | Filed         |
| EP                  |                  | 949080568       | 5/31/95          | 0655077         | Filed         |
| AT                  | 8/10/93          | 949080568       | 5/31/95          | 0655077         | Issued        |
| AU                  | 8/10/93          | 4723893         | 3/6/97           | 676191          | Issued        |
| BE                  | 8/10/93          | 94908568        | 5/31/95          | 0655077         | Issued        |
| CA                  | 8/10/93          | 2142333         | 3/3/94           |                 | Pending       |
| CH                  | 8/10/93          | 94908568        | 5/31/95          | 0655077         | Issued        |
| DE                  | 8/10/93          | 94908568        | 5/31/95          | 0655077         | Issued        |
| DK                  | 8/10/93          | 94908568        | 5/31/95          | 0655077         | Issued        |
| ES                  | 8/10/93          | 94908568        | 5/31/95          | 0655077         | Issued        |
| FI                  | 8/10/93          | 950593          |                  |                 | Pending       |
| FR                  | 8/10/93          | 94908568        | 5/31/95          | 0655077         | Issued        |

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|----|---------|----------|---------|------------|---------|
| GB | 8/13/92 | 92171313 |         |            | Aband.  |
| GB | 8/10/93 | 94908568 | 5/31/95 | 0655077    | Issued  |
| IT | 8/10/93 | 94908568 | 5/31/95 | 0655077    | Issued  |
| JP | 8/10/93 | 50599494 | 3/5/96  | OP50208596 | Pending |
| NL | 8/10/93 | 94908568 | 5/31/95 | 0655077    | Issued  |
| NO | 8/10/93 | 19950522 | 1/3/00  | 306864     | Issued  |
| SE | 8/10/93 | 94908568 | 5/31/95 | 065507     | Issued  |

12. Title: **POLYMER COMPOSITION COMPRISING A CRYSTALLIZABLE POLYMER STABILIZED IN AN AMORPHOUS OR INCOMPLETE STATE**

Inventor(s): **Clauss, et al**  
U.S. Patent No.: **5,599,891**  
Issued: **February 4, 1997**  
Serial No.: **08/407,030**  
Filed: **September 28, 1993**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 9/28/93          | GB9302014       | 4/14/94          | WO9407940       | Filed         |
| EP                  | 9/28/93          | 939210100       | 7/12/95          | 0662097         | Allowed       |
| AU                  | 9/28/93          | 4829693         | 2/13/97          | 675664          | Lapsed        |
| BR                  | 9/28/93          | PI93071302      |                  |                 | Aband.        |
| CA                  | 9/28/93          | 2144449         | 4/14/94          |                 | Pending       |
| FI                  | 9/28/93          | 951452          |                  |                 | Pending       |
| GB                  | 9/28/92          | 92204478        |                  |                 | Pending       |
| GB                  | 9/28/92          | 92204015        |                  |                 | Pending       |
| GB                  | 9/28/92          | 93046514        |                  |                 | Pending       |
| JP                  | 9/28/93          | 50882694        | 3/5/96           | OP50208896      | Pending       |
| KR                  | 9/28/93          | 70059511999     |                  |                 | Aband.        |
| NO                  | 9/28/93          | 19951158        |                  |                 | Aband.        |

13. Title: **PROCESS FOR SEPARATION OF SOLID MATERIALS FROM MICROORGANISMS**

Inventor(s): **Cumming, et al**  
U.S. Patent No.: **5,622,847**  
Issued: **April 22, 1997**  
Serial No.: **08/433,501**  
Filed: **November 12, 1993**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 11/12/93         | GB9302329       | 5/26/94          | WO9411491       | Filed         |
| EP                  |                  | 939247524       | 9/13/95          | 0670891         | Filed         |
| AT                  | 11/12/93         | 939247524       | 9/13/95          | 0670891         | Lapsed        |
| AU                  | 11/12/93         | 5429994         | 1/31/97          | 675991          | Lapsed        |

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|----|----------|------------|---------|------------|---------|
| BE | 11/12/93 | 939247524  | 9/13/95 | 0670891    | Issued  |
| BR | 11/12/93 | PI93074280 |         |            | Aband.  |
| CA | 11/12/93 | 2147985    | 5/26/94 | 0670891    | Aband.  |
| DE | 11/12/93 | 939247524  | 9/13/95 | 0670891    | Issued  |
| DK | 11/12/93 | 939247524  | 9/13/95 | 0670891    | Lapsed  |
| ES | 11/12/93 | 939247524  | 9/13/95 | 0670891    | Lapsed  |
| FI | 11/12/93 | 952292     |         |            | Pending |
| FR | 11/12/93 | 939247524  | 9/13/95 | 0670891    | Issued  |
| GB | 11/12/92 | 92237098   |         |            | Aband.  |
| GB | 11/12/92 | 939247524  | 9/13/95 | 0670891    | Issued  |
| IT | 11/12/92 | 939247524  | 9/13/95 | 0670891    | Issued  |
| JP | 11/12/92 | 51186094   | 4/9/96  | OP50313196 | Pending |
| KR | 11/12/92 | 7018941995 |         |            | Aband.  |
| LU | 11/12/92 | 939247524  | 9/13/95 | 0670891    | Lapsed  |
| NL | 11/12/92 | 939247524  | 9/13/95 | 0670891    | Lapsed  |
| NO | 11/12/92 | 951867     |         |            | Aband.  |
| PT | 11/12/92 | 939247524  | 9/13/95 | 0670891    | Lapsed  |

14. Title: **POLYHYDROXYALKANOATES AND FILM FORMATION THEREFROM**

Inventor(s): **Waddington**  
 U.S. Patent No.: **5,534,616**  
 Issued: **July 19, 1996**  
 Serial No.: **08/491,929**  
 Filed: **January 12, 1994**

14a. Title: **POLYHYDROXYALKANOATES AND FILM FORMATION THEREFROM**

Inventor(s): **Waddington**  
 U.S. Patent No.: **5,578,382**  
 Issued: **November 26, 1996**  
 Serial No.: **08/595,213**  
 Filed: **February 1, 1996**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 1/12/94          | GB9400056       | 7/21/94          | WO9416000       | Filed         |
| EP                  | 1/12/94          | 949042410       | 2/7/96           | 0695321         | Filed         |
| AU                  | 1/12/94          | 5837694         | 9/11/97          | 681862          | Lapsed        |
| BE                  | 1/12/94          | 949042410       | 2/7/96           | 0695321         | Opp.          |
| CA                  | 1/12/94          | 2153807         |                  |                 | Pending       |
| DE                  | 1/12/94          | 949042410       | 2/7/96           | 0695321         | Opp.          |
| FI                  | 1/12/94          | 953411          |                  |                 | Pending       |
| FR                  | 1/12/94          | 949042410       | 2/7/96           | 0695321         | Opp.          |
| GB                  | 1/13/93          | 93005544        |                  |                 | Aband.        |
| GB                  | 1/12/94          | 949042410       | 2/7/96           | 0695321         | Opp.          |

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|----|---------|-----------|---------|------------|---------|
| IT | 1/12/94 | 949042410 | 2/7/96  | 0695321    | Opp.    |
| JP | 1/12/94 | 51583394  | 6/11/96 | OP50541596 | Pending |

**15. Title: ADHESION PROCESS USING PHA**

Inventor(s): **Kemmish**  
U.S. Patent No.: **5,711,842**  
Issued: **January 27, 1998**  
Serial No.: **08/591,558**  
Filed: **July 11, 1994**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 7/11/94          | GB9401496       | 1/26/95          | WO9502649       | Filed         |
| EP                  | 7/11/94          | 949205397       | 5/1/96           | 0708804         | Filed         |
| AU                  | 7/11/94          | 7129294         | 1/15/98          | 685135          | Lapsed        |
| BE                  | 7/11/94          | 949205397       | 5/1/96           | 0708804         | Issued        |
| CA                  | 7/11/94          | 2166613         | 1/26/95          | OPNONE          | Pending       |
| DK                  | 7/11/94          | 949205397       | 5/1/96           | 0708804         | Issued        |
| FI                  | 7/11/94          | 960158          |                  |                 | Pending       |
| GB                  | 7/11/94          | 949205397       | 5/1/96           | 0708804         | Issued        |
| IT                  | 7/11/94          | 949205397       | 5/1/96           | 0708804         | Issued        |
| JP                  | 7/11/94          | 50439695        | 1/7/97           | OP50015797      | Pending       |
| NO                  | 7/11/94          | 19960153        |                  |                 | Aband.        |

**16. Title: POLYESTER COMPOSITION**

Inventor(s): **Hammond, et al**  
U.S. Patent No.: **5,753,782**  
Issued: **May 19, 1998**  
Serial No.: **08/553,649**  
Filed: **June 1, 1994**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 6/1/94           | GB9401184       | 12/8/94          | WO9428061       | Filed         |
| EP                  | 6/1/94           | 949170773       | 3/20/96          | 0701586         | Und. App.     |
| CA                  | 6/1/94           | 2163444         | 12/8/94          |                 | Pending       |
| GB                  | 6/2/93           | 93113991        |                  |                 | Aband.        |
| JP                  | 6/1/94           | 50042195        | 2/10/97          | OP50145097      | Pending       |

**17. Title: SEPARATION PROCESS**

Inventor(s): **Holmes, et al**  
U.S. Patent No.: **4,910,145**  
Issued: **March 20, 1990**  
Serial No.: **07/374,567**  
Filed: **November 5, 1984**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  |                  | 843075425       | 6/19/85          | 0145233         | Filed         |
| BE                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |
| CA                  | 12/20/85         | 498397          |                  |                 | Issued        |
| CH                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |
| DE                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |
| GB                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |
| IT                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |
| JP                  | 11/21/84         | 24697584        | 10/1/92          | 6163892         | Issued        |
| NL                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |
| SE                  | 11/1/84          | 843075425       | 6/19/85          | 0145233         | Issued        |

18. Title: **POLYMER PRODUCTION/POLYESTERS HAVING C8 AND/OR C10 MONOMER REPEAT UNITS**

Inventor(s): Anderson, et al.  
U.S. Patent No.: 5,296,362  
Issued: March 22, 1994  
Serial No.: 07/507,842  
Filed: February 17, 1998

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  |                  | 903031193       | 10/17/90         | 0392687         | Filed         |
| AU                  | 1/31/99          | 5240590         | 2/18/93          | 634218          | Lapsed        |
| BR                  | 1/31/99          | PI90017323      |                  |                 | Aband.        |
| CA                  | 8/2/96           | 2014238         |                  |                 | Aband.        |
| CH                  | 1/31/99          | 903031193       | 10/17/90         | 0392687         | Lapsed        |
| DE                  | 2/17/98          | 903031193       | 10/17/90         | 0392687         | Issued        |
| FR                  | 2/17/98          | 903031193       | 10/17/90         | 0392687         | Issued        |
| GB                  | 2/17/98          | 903031193       | 10/17/90         | 0392687         | Issued        |
| IN                  | 12/19/94         | 319DEL90        |                  |                 | Aband.        |
| JP                  | 1/14/00          | 9747490         | 12/11/90         | OP29959090      | Aband.        |
| KR                  | 2/27/95          | 49461990        |                  |                 | Aband.        |
| MW                  | 3/4/93           | MW2390          |                  |                 | Aband.        |
| NL                  | 1/31/99          | 903031193       | 10/17/90         | 0392687         | Lapsed        |
| NZ                  | 1/31/99          | 233296          | 10/11/92         | 233296          | Lapsed        |
| SZ                  | 3/4/93           | RP461991        |                  |                 | Lapsed        |
| TW                  | 1/31/99          | 79102871        | 3/21/91          |                 | Lapsed        |
| ZA                  | 1/31/99          | 902399          |                  |                 | Lapsed        |
| ZW                  | 11/23/93         | 4890            |                  |                 | Lapsed        |

19. Title: **HV/HB COPOLYMER PRODUCTION**  
 Inventor(s): **Cox, et al.**  
 U.S. Patent No.: **6,080,562**  
 Issued: **June 27, 2000**  
 Serial No.: **07/949,524**  
 Filed: **May 24, 1991**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  |                  |                 |                  | 0535012         | Filed         |
| AT                  | 5/24/91          | 919102236       | 4/7/93           | 0535012         | Lapsed        |
| AU                  | 5/24/91          | 7970891         | 9/15/94          | 652942          | Lapsed        |
| CA                  | 5/24/91          | 2083695         | 11/26/91         |                 | Pending       |
| DE                  | 5/24/91          | 919102236       | 4/7/93           | 0535012         | Issued        |
| GB                  | 5/25/90          | 919102236       |                  |                 | Aband.        |
| GB                  | 5/24/91          | 90117771        | 4/7/93           | 0535012         | Issued        |
| IT                  | 5/24/91          | 919102236       | 4/7/93           | 0535012         | Issued        |
| JP                  | 5/24/91          | 50952491        |                  |                 | Pending       |
| KR                  | 5/24/91          | 70296892        |                  |                 | Aband.        |

20. Title: **PROCESS FOR THE RECOVERY OF POLYHYDROXYALKANOIC ACID**  
 Inventor(s): **Liddell**  
 U.S. Patent No.: **5,894,062**  
 Issued: **April 13, 1999**  
 Serial No.: **08/793,832**  
 Filed: **August 15, 1995**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 8/15/95          | GB9501926       | 2/29/96          | WO9606179       | Filed         |
| EP                  | 8/15/95          | 959278979       | 6/4/97           | 0776372         | Filed         |
| BE                  | 8/15/95          | 959278979       | 6/4/97           | 0776372         | Issued        |
| CA                  | 8/15/95          | 2197783         |                  |                 | Pending       |
| DE                  | 8/15/95          | 959278979       | 6/4/97           | 0776372         | Issued        |
| FI                  | 8/15/95          | 970680          |                  |                 | Pending       |
| FR                  | 8/15/95          | 959278979       | 6/4/97           | 0776372         | Issued        |
| GB                  | 8/18/94          | 94166907        |                  |                 | Aband.        |
| GB                  | 8/15/95          | 959278979       | 6/4/97           | 0776372         | Issued        |
| IT                  | 8/15/95          | 959278979       | 6/4/97           | 0776372         | Issued        |
| JP                  | 8/15/95          | 50785096        | 5/6/98           | KOHYO50446098   | Pending       |
| KR                  | 8/15/95          |                 |                  |                 | Aband.        |
| MX                  | 8/15/95          |                 |                  |                 | Aband.        |
| NO                  | 8/15/95          | 19970739        |                  |                 | Aband.        |

21. Title: **PRODUCTION OF POLYMER COMPOSITION**  
 Inventor(s): **George, et al.**  
 U.S. Patent No.: **5,891,936**  
 Issued: **April 6, 1999**  
 Serial No.: **08/894,346**  
 Filed: **February 12, 1996**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 2/12/96          | GB9600305       | 8/22/96          | WO9625452       | Filed         |
| EP                  | 2/12/96          | 969023456       | 12/3/97          | 0809669         | Filed         |
| BE                  | 2/12/96          | 969023456       |                  | 0809669         | Issued        |
| DE                  | 2/12/96          | 969023456       | 12/3/97          | 0809669         | Issued        |
| FI                  | 2/12/96          | 973364          |                  |                 | Pending       |
| FR                  | 2/12/96          | 969023456       | 12/3/97          | 0809669         | Issued        |
| GB                  | 2/16/95          | 95029807        |                  |                 |               |
| GB                  | 12/21/95         | 95262812        |                  |                 |               |
| GB                  | 2/12/96          | 969023456       | 12/3/97          | 0809669         | Issued        |
| IT                  | 2/12/96          | 969023456       | 12/3/97          | 0809669         | Issued        |
| JP                  | 2/12/96          | 52474596        | 1/12/99          | KOHY050047699   | Pending       |

22. Title: **LATEX OF POLYHYDROXYALKANOATE**  
 Inventor(s): **George, et al.**  
 U.S. Patent No.: **5,977,250**  
 Issued: **November 2, 1999**  
 Serial No.: **08/875,976**  
 Filed: **February 9, 1996**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 2/9/96           | GB9600284       | 8/15/96          | WO9624682       | Filed         |
| EP                  | 2/9/96           | 969019264       | 11/26/97         | 0808373         | Filed         |
| BE                  | 2/9/96           | 969019264       | 11/26/97         | 0808373         | Opp.          |
| DE                  | 2/9/96           | 969019264       | 11/26/97         | 0808373         | Opp.          |
| FI                  | 2/9/96           | 973297          |                  |                 | Pending       |
| FR                  | 2/9/96           | 969019264       | 11/26/97         | 0808373         | Opp.          |
| GB                  | 2/9/95           | 95025219        |                  |                 | Aband.        |
| GB                  | 2/9/96           | 969019264       | 11/26/97         | 0808373         | Opp.          |
| IT                  | 2/9/96           | 969019264       | 11/26/97         | 0808373         | Opp.          |
| JP                  | 2/9/96           | 52408896        | 1/19/99          | KOHY050061399   | Pending       |

23. Title: **A METHOD FOR PREPARING A COMPOSTIBLE LAMINATE WITH POLYCAPROLACTONE AND A POLY 3-HYDROXYALKANOIC ACID**  
 Inventor(s): **Karhuketo, et al.**  
 Serial No.: **08/930,212**  
 Filed: **February 2, 1998**  
**Under Appeal**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 4/4/96           | GB9600819       | 10/10/96         | WO9631347       | Filed         |
| EP                  | 4/4/96           | 969082908       | 1/21/98          | 0819058         | Pending       |
| CA                  | 4/4/96           | 2217640         |                  |                 | Pending       |
| GB                  | 4/7/95           | 95072633        |                  |                 | Aband.        |
| JP                  | 4/4/96           | 53009596        |                  |                 | Pending       |

24. Title: **DISPERSIONS OF POLYHYDROXYALKANOATES IN WATER**  
 Inventor(s): **George**  
 Serial No.: **09/077,953**  
 Filed: **June 19, 2000**  
**Abandoned**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 12/12/96         | US9619886       | 6/19/97          | WO9721762       | Filed         |
| EP                  | 12/12/96         | 969448075       |                  |                 | Pending       |
| CA                  | 12/12/96         | 2239980         |                  |                 | Pending       |
| GB                  | 12/12/95         | 95253902        |                  |                 | Aband.        |
| JP                  | 12/12/96         | 52223197        | 2/29/00          | 2000502375      | Pending       |
| MX                  | 12/12/96         | 984764          |                  |                 | Aband.        |

25. Title: **INCREASING THE PARTICLE SIZE OF POLYMERS**  
 Inventor(s): **George, et al.**  
 U.S. Patent No.: **5,798,440**  
 Issued: **August 25, 1998**  
 Serial No.: **08/374,662**  
 Filed: **July 13, 1993**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 7/13/93          | GB9301465       | 2/3/94           | WO9402622       | Filed         |
| EP                  |                  | 939160594       | 5/17/95          | 0652969         | Filed         |
| AT                  | 7/13/93          | 939160594       | 5/17/95          | 0652969         | Lapsed        |
| AU                  | 7/13/93          | 4576593         | 4/16/97          | 677787          | Lapsed        |
| BE                  | 7/13/93          | 939160594       | 5/17/95          | 0652969         | Issued        |

|    |         |            |          |            |         |
|----|---------|------------|----------|------------|---------|
| BR | 7/13/93 | PI93067569 | 12/8/98  |            | Aband.  |
| CA | 7/13/93 | 2137794    | 2/3/94   |            | Aband.  |
| CH | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Lapsed  |
| DE | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Issued  |
| DK | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Lapsed  |
| ES | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Lapsed  |
| FI | 7/13/93 | 950284     |          |            | Pending |
| FR | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Issued  |
| GB | 7/24/92 | 92157916   |          |            | Aband.  |
| GB | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Issued  |
| IE | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Lapsed  |
| IT | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Issued  |
| JP | 7/13/93 | 50424794   | 10/12/95 | OP50913195 | Pending |
| KR | 7/13/93 | 70475494   |          |            | Aband.  |
| NL | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Lapsed  |
| NO | 7/13/93 | 19950241   |          |            | Aband.  |
| NZ | 7/13/93 | 254186     | 11/26/96 | 254186     | Lapsed  |
| RU | 7/13/93 | 95104935   |          |            | Aband.  |
| SE | 7/13/93 | 939160594  | 5/17/95  | 0652969    | Lapsed  |
| ZA | 7/16/93 | 935179     | 6/29/94  | 935179     | Lapsed  |

26. Title: **MULTILAYER BIODEGRADABLE FILM**

Inventor(s): **Kemmish, et al.**

Serial No.: **08/647,909**

Filed: **May 30, 1996**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 11/29/94         | GB9402609       | 6/8/95           | WO9515260       | Filed         |
| EP                  | 11/29/94         | 959021874       | 9/18/96          | 0731754         | Filed         |
| BE                  | 11/29/94         | 959021874       | 9/18/96          | 0731754         | Issued        |
| CA                  | 11/29/94         | 2177065         |                  |                 | Pending       |
| DE                  | 11/29/94         | 959021874       | 9/18/96          | 0731754         | Issued        |
| FI                  | 11/29/94         | 962251          |                  |                 | Pending       |
| FR                  | 11/29/94         | 959021874       | 9/18/96          | 0731754         | Issued        |
| GB                  | 11/30/93         | 93245124        |                  |                 | Aband.        |
| GB                  | 11/29/94         | 959021874       | 9/18/96          | 0731754         | Issued        |
| IT                  | 11/29/94         | 959021874       | 9/18/96          | 0731754         | Issued        |
| JP                  | 11/29/94         | 51547295        | 6/24/97          | OP50630397      | Pending       |

27. Title: **COPOLYESTERS AND PROCESS FOR THEIR**

**PRODUCTION**

Inventor(s): **Collins, et al.**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| EP                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Filed         |
| AU                  | 5/24/82          | 8410882         | 4/16/87          | 560653          | Issued        |
| BE                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| CA                  | 7/5/83           | 431821          | 7/30/87          | 1223687         | Issued        |
| CH                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| DE                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| FR                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| GB                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| IT                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| JP                  | 7/7/82           | 11831682        | 6/25/92          | 3876392         | Issued        |
| JP                  | 7/7/82           | 21877193        | 5/24/95          | 4762395         | Issued        |
| NL                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |
| NZ                  | 6/23/82          | 201054          | 6/19/86          | 201054          | Issued        |
| NZ                  | 6/23/82          | 213039          |                  | 213039          | Issued        |
| SE                  | 6/21/82          | 823032149       | 1/12/83          | 0069497         | Issued        |

28. Title: **POLYHYDROXYALKANOATES OF NARROW MOLECULAR WEIGHT DISTRIBUTION PREPARED IN TRANSGENIC PLANTS**

Inventor(s): **Asrar, et al.**

U.S. Patent No.: **6,091,002**

Issued: **August 15, 2000**

Serial No.: **08/912,205**

Filed: **August 15, 1997**

US Divisional Filed: 11/15/99 Serial No.: 09/440400 Status: Allowed  
 US Divisional Filed: 11/30/99 Serial No.: Not known Status: Pending

29. Title: **METHODS FOR THE BIOSYNTHESIS OF POLYESTERS**

Inventor(s): **Gottschalk, et al.**

Serial No.: **09/380,773**

Filed: **September 3, 1999**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 3/3/97           | US9703994       | 9/11/98          | WO9839453       | Filed         |
| EP                  | 3/3/97           | 979159415       | 10/13/99         | 0958367         | Pending       |

30. Title: **PHA COMPOSITIONS AND METHODS FOR THEIR USE  
IN THE PRODUCTION OF PHA FILMS**

Inventor(s): **Asrar, et al.**

Serial No.: **09/122,147**

Filed: **July 24, 1998**

**CPA filed recently under Section 1.53(d)**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 7/24/98          | US9815398       | 2/4/99           | WO9905207       | Filed         |
| EP                  | 7/24/98          | 989370895       | 5/3/00           | 0996670         | Pending       |

31. Title: **MODIFIED POLYHYDROXYALKANOATES FOR  
PRODUCTION OF COATINGS AND FILMS**

Inventor(s): **Asrar, et al.**

U.S. Patent Nos.: **6,096,810; 6,201,083**

Issued: **August 1, 2000; March 13, 2001**

Serial Nos.: **09/156,147; 09/609,878**

Filed: **September 18, 1998; July 5, 2000**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 9/18/98          | US9819461       | 3/25/99          | WO9914268       | Filed         |
| EP                  | 9/18/98          | 989471123       | 8/2/00           | 1023378         | Allowed       |

32. Title: **PLASTICIZED POLYHYDROXYALKANOATE  
COMPOSITIONS AND METHODS FOR THEIR USE IN  
THE PRODUCTION OF SHAPED POLYMERIC ARTICLES**

Inventor(s): **Asrar, et al.**

U.S. Patent No.: **6,127,512**

Issued: **October 3, 2000**

Serial No.: **09/179,271**

Filed: **October 31, 1997**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 10/27/98         | US9822753       | 5/14/99          | WO9923146       | Filed         |
| EP                  | 10/27/98         | 989562459       | 8/9/00           | 1025152         | Pending       |

33. Title: **POLYMER BLENDS CONTAINING POLYHYDROXYALKANOATES AND COMPOSITIONS WITH GOOD RETENTION OF ELONGATION**

Inventor(s): **Asrar, et al.**  
 U.S. Patent No.: **6,191,203**  
 Issued: **February 20, 2001**  
 Serial No.: **09/714,469; 09/179,780 (Divisional: Pending)**  
 Filed: **November 16, 2000; October 31, 1997**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 10/27/98         | US9822723       | 5/14/99          | WO9923161       | Filed         |
| EP                  | 10/27/98         | US9822723       |                  |                 | Pending       |

34. Title: **BIOSYNTHESIS OF MEDIUM CHAIN LENGTH POLYHYDROXYALKANOATES**

Inventor(s): **Poirier, et al.**  
 Serial No.: **09/582,534**  
 Filed: **June 27, 2000**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 1/5/98           | US9800083       | 7/15/99          | WO9935278       | Filed         |
| EP                  | 1/5/98           | US9800083       |                  |                 | Pending       |

35. Title: **PHAE AND PHAC COMPONENTS OF POLY(HYDROXY FATTY ACID) SYNTHASE FROM THIOPAPASA**

Inventor(s): **Liebergessell, et al.**  
 U.S. Patent No.: **6,011,144**  
 Issued: **January 4, 2000**  
 Serial No.: **08/809,286**  
 Filed: **September 15, 1995**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| US                  | 10/18/99         | 09/420119       |                  |                 |               |
| US (Divisional)     | 02/01/01         | (unconfirmed)   |                  |                 |               |
| WO                  | 9/15/95          | DE9501279       | 3/21/96          | WO9608566       | Filed         |
| EP                  | 9/15/95          | 959311499       |                  |                 | Pending       |
| CA                  | 9/15/95          | 2203264         |                  |                 | Pending       |
| DE                  | 9/16/94          | P44331347       |                  |                 | Pending       |

36. Title: **HYDROXY-TERMINATED POLYHYDROXYALKANOATES**  
 Inventor(s): **Asrar, et al.**  
 U.S. Patent No.: **5,994,478**  
 Issued: **November 30, 1999**  
 Serial No.: **09/063,256**  
 Filed: **April 20, 1998**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| US (Divisional)     | 10/1/99          | 09/410708       | 3/20/01          | 6204341         | Issued        |
| US (Divisional)     | 4/20/98          | (Not known)     |                  |                 |               |
| US (Divisional)     | 8/17/00          | 09/640641       |                  |                 | Allowed       |
| WO                  | 4/20/98          | US9807967       | 10/29/98         | WO9848028       | Filed         |
| WO                  | 6/14/99          | US9913321       | 12/16/99         | WO9964617       | Filed         |
| EP                  | 4/20/98          | 989184924       | 2/9/00           | 0977882         | Pending       |
| EP                  | 6/14/99          | US9913321       |                  |                 | Pending       |
| EP (C-I-P)          | 6/14/99          | 99275100        | 4/4/01           | 1088093         | Pending       |

36a. Title: **HYDROXY-TERMINATED POLYHYDROXYALKANOATES**  
 Inventor(s): **Asrar, et al.**  
 U.S. Patent No.: **6,156,852**  
 Issued: **December 5, 2000**  
 Serial No.: **09/096,797**  
 Filed: **April 29, 1997**

37. Title: **PRODUCTION OF POLYHYDROXYALKANOATE IN PLANTS**  
 Inventor(s): **Bright, et al.**  
 U.S. Patent No.: **5,502,273; 6,175,061**  
 Issued: **March 26, 1996; January 16, 2001**  
 Serial No.: **08/536,123; 08/536123**  
 Filed: **September 28, 1994; September 29, 1995**  
 CPA Filed: **April 20, 2000**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 4/23/92          | GB9200742       | 11/12/92         | WO9219747       | Filed         |
| EP                  | 4/23/92          | 929089209       | 4/6/94           | 0589898         | Pending       |
| AU                  | 4/23/92          | 1579792         | 1/12/95          | 655816          | Lapsed        |
| CA                  | 4/23/92          | 2109221         |                  |                 | Pending       |
| GB                  | 4/24/91          | 910876569       |                  |                 | Aband.        |
| JP                  | 4/23/92          | 50805792        |                  |                 | Pending       |

38. Title: **PRODUCTION OF POLYHYDROXYALKANOATE**  
 Inventor(s): **Liebergesell, et al.**  
 Serial No.: **08/178,257**  
 Filed: **July 15, 1992**  
**Petition to Revive Granted: February 20, 2001**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 7/15/92          | GB9201291       | 2/4/93           | WO9302194       | Filed         |
| EP                  | 7/15/92          | 929145936       | 5/4/94           | 0594678         | Pending       |
| AU                  | 7/15/92          | 2312792         | 9/15/96          | 671595          | Lapsed        |
| CA                  | 7/15/92          | 2113432         |                  |                 | Pending       |
| GB                  | 7/16/91          | 91152454        |                  |                 | Aband.        |
| JP                  | 7/15/92          | 50266993        |                  |                 | Pending       |

39. Title: **IMPROVED PRODUCTION OF POLYHYDROXYALKANOATE USING GRANULE-BINDING PROTEIN WHICH CONTROLS GRANULE SIZE AND NUMBER**  
 Inventor(s): **Innis**  
 U.S. Patent No.: **6,022,729**  
 Issued: **February 8, 2000**  
 Serial No.: **08/702,870**  
 Filed: **July 11, 1995**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| US                  | 7/11/95          | 08/500735       |                  |                 | Pending(?)    |
| GB                  | 7/18/94          | 94145067        |                  |                 | Aband.        |

40. Title: **PREVENTION OF GELATION OF POLYHYDROXYALKANOATE SOLUTIONS USING SHEAR**  
 Inventor(s): **\_\_\_\_**  
 Serial No.: **60/188,440**  
 Filed: **March 10, 2000**

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 3/5/01           | Not known       |                  |                 | Pending       |

41. Title: **POLYHYDROXYALKANOATE COATINGS**  
 Inventor(s): **Asrar et al.**  
 U.S. Patent No.: **6,025,028**  
 Issue: **2/15/00**  
 Serial No.: **60/053,724**

Filed: 7/25/97

| <u>Country Code</u> | <u>App. Date</u> | <u>App. No.</u> | <u>Pub. Date</u> | <u>Pub. No.</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|-----------------|---------------|
| WO                  | 7/24/98          | US9815149       | 2/4/99           | WO9904948       | Filed         |
| EP                  | 7/24/98          | 989359153       | 5/10/00          | 0998381         | Pending       |

42. Title: **NUCLEATING AGENTS FOR  
POLYHYDROXYALKANOATES AND OTHER  
THERMOPLASTIC POLYESTERS AND THEIR  
PRODUCTION**

Inventor(s): Asrar et al.  
U.S. Patent No.: 5,973,100  
Issued: October 26, 1999  
Serial No.: 09/122440  
Filed: 7/24/98

| <u>Country Code</u> | <u>App. Date</u> | <u>Pat. No.</u> | <u>Pub. Date</u> | <u>Status</u> |
|---------------------|------------------|-----------------|------------------|---------------|
| WO                  | 07/24/98         | WO9905208       | 2/4/99           |               |
| EP                  | 07/24/98         | 0996671         | 2/4/99           | Pending       |

**SCHEDULE B to the Patent Assignment**

**Patents and Patent Applications  
That Have Not Been Maintained**

1. Title:

Inventor(s):

U.S. Patent No.:

Issued:

Status:

Serial No.:

Filed:

**POLYMER BLENDS AND COMPATIBILIZERS**

**Ballard, et al.**

**5,478,892**

**December 26, 1995**

**Lapsed**

**08/295,626**

**August 24, 1994**

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.   | Status |
|--------------|-----------|-----------|-----------|------------|--------|
| WO           | 2/26/93   | GB9300401 | 9/2/93    | WO9317064  | Filed  |
| EP           |           | 939042644 | 12/21/94  | 0629219    | Filed  |
| AU           | 2/26/93   | 3572193   | 1/11/96   | 666710     | Lapsed |
| BE           | 2/26/93   | 939042644 | 12/21/94  | 0629219    | Lapsed |
| CA           | 2/26/93   | 2128435   | 9/2/93    |            | Aband. |
| DE           | 2/26/93   | 939042644 | 12/21/94  | 0629219    | Lapsed |
| FI           | 2/26/93   | 943930    |           |            | Aband. |
| FR           | 2/26/93   | 939042644 | 12/21/94  | 0629219    | Lapsed |
| GB           | 2/26/93   | 939042644 | 12/21/94  | 0629219    | Lapsed |
| JP           | 2/26/93   | 51467093  | 5/18/95   | 0P50444995 | Aband. |
| KR           | 2/26/93   | 70298194  |           |            | Aband. |
| NO           | 2/26/93   | 19943157  |           |            | Aband. |
| NZ           | 2/26/93   | 249218    | 1/26/96   |            | Lapsed |

2. Title:

**POLYMER COMPOSITION CONTAINING  
POLYHYDROXYALKANOATE AND METAL  
COMPOUND**

Inventor:

U.S. Patent No.:

Issued:

Status:

Serial No.:

Filed:

**Hammond**

**5,646,217**

**July 8, 1997**

**Lapsed**

**08/433,343**

**November 4, 1993**

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.  | Status |
|--------------|-----------|-----------|-----------|-----------|--------|
| WO           | 11/4/93   | GB9302280 | 5/26/94   | WO9411440 | Filed  |
| EP           | 11/4/93   | 939247052 | 9/6/95    | 0669959   | Aband. |
| AU           | 11/4/93   | 5426894   | 12/19/96  | 674361    | Lapsed |
| CA           | 11/4/93   | 2147857   | 5/26/94   |           | Aband. |
| FI           | 11/4/93   | 952162    |           |           | Aband. |
| GB           | 11/6/92   | 92233519  |           |           | Aband. |

|    |         |          |         |            |        |
|----|---------|----------|---------|------------|--------|
| JP | 11/4/93 | 51182894 | 4/16/96 | OP54350096 | Aband. |
| NO | 11/4/93 | 951766   |         |            | Aband. |

**3. Title: PROCESS OF POLYESTERS**

Inventor(s): **Liggat, et al.**  
U.S. Patent No.: **5,789,536**  
Issued: **August 4, 1998**  
Status: **Lapsed**  
Serial Nos.: **08/553,642**  
Filed: **June 1, 1994**

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.   | Status |
|--------------|-----------|-----------|-----------|------------|--------|
| WO           | 6/1/94    | GB9401181 | 12/8/94   | WO9428047  | Filed  |
| EP           | 6/1/94    | 949170740 | 3/20/96   | 0701580    | Aband. |
| CA           | 6/1/94    | 2163552   | 12/8/94   |            | Aband. |
| GB           | 6/2/93    | 93114023  |           |            | Aband. |
| JP           | 6/1/94    | 52585594  | 10/29/96  | OP51029396 | Aband. |

**4. Title: POLYMER COMPOSITIONS AND PROCESSES  
PRODUCED FROM HYDROXYALKANOIC ACID**

Inventor(s): **Greer, et al.**  
U.S. Patent No.: **5,525,658**  
Issued: **June 11, 1996**  
Status: **Lapsed**  
Serial Nos.: **08/374,663**  
Filed: **July 15, 1995**

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.   | Status |
|--------------|-----------|-----------|-----------|------------|--------|
| WO           | 7/15/93   | GB9301492 | 2/3/94    | WO9402541  | Filed  |
| EP           |           | 939160859 | 5/10/95   | 0651775    |        |
| AU           | 7/15/93   | 4578293   |           |            | Lapsed |
| BE           | 7/15/93   | 939160859 | 5/10/95   | 0651775    | Lapsed |
| CA           | 7/15/93   | 2137580   | 2/3/94    |            | Aband. |
| FI           |           | 7/15/93   | 950285    |            | Aband. |
| FR           | 7/15/93   | 939160859 | 5/10/95   | 0651775    | Lapsed |
| GB           | 7/15/93   | 939160859 | 5/10/95   | 0651775    | Lapsed |
| JP           | 7/15/93   | 50425994  | 10/12/95  | OP50926595 | Aband. |
| ZA           | 7/21/93   | 935288    |           |            | Lapsed |

**5. Title: POLYESTER COMPOSITION**

Inventor(s): **Liggat, et al.**  
U.S. Patent No.: **5,693,389**  
Issued: **December 2, 1997**  
Status: **Lapsed**  
Serial Nos.: **08/553,412**  
Filed: **May 20, 1994**

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.   | Status |
|--------------|-----------|-----------|-----------|------------|--------|
| WO           | 5/20/94   | GB9401095 | 12/8/94   | W09428070  | Filed  |
| EP           | 5/20/94   | 949156400 | 3/13/96   | 0700418    | Aband. |
| AU           | 5/20/94   | 6727594   | 11/13/97  | 683466     | Lapsed |
| CA           | 5/20/94   | 2162173   | 12/8/94   |            | Aband. |
| FI           | 5/20/94   | 955645    |           |            | Aband. |
| GB           | 5/24/93   | 93107126  |           |            | Aband. |
| JP           | 5/20/94   | 50035895  | 11/5/96   | OP51049896 | Aband. |
| NO           | 5/20/94   | 954748    |           |            | Aband. |

6. Title: **PROCESSING OF POLYESTERS**

Inventor(s): **Liggat, et al.**

U.S. Patent No.: **5,874,040**

Issued: **February 23, 1999**

Status: **Lapsed**

Serial Nos.: **08/892,311**

Filed: **July 14, 1997**

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.   | Status |
|--------------|-----------|-----------|-----------|------------|--------|
| WO           | 6/1/94    | GB9401183 | 12/8/94   | W09428049  | Filed  |
| EP           | 6/1/94    | 949170765 | 3/20/96   | 0701582    | Aband. |
| CA           | 6/1/94    | 2163553   |           |            | Aband. |
| GB           | 6/2/93    | 93114007  |           |            | Aband. |
| JP           | 6/1/94    | 50042095  | 2/20/97   | OP50144997 | Aband. |

7. Title: **PROCESS FOR PREPARING FILMS AND COATINGS**

Inventor(s): **Liddell, et al.**

U.S. Patent No.: **5,691,174**

Issued: **November 25, 1997**

Status: **Lapsed**

Serial Nos.: **08/530,332**

Filed: **April 7, 1994**

| Country Code | App. Date | App. No.   | Pub. Date | Pub. No.  | Status |
|--------------|-----------|------------|-----------|-----------|--------|
| WO           | 4/7/94    | GB9400741  | 10/27/94  | W09424302 | Filed  |
| EP           |           | 949120273  | 1/31/96   | 0694074   | Filed  |
| AU           | 4/7/94    | 6434494    | 1/31/97   | 676035    | Lapsed |
| BE           | 4/7/94    | 949120273  | 1/31/96   | 0694074   | Lapsed |
| BR           | 4/7/94    | PI94064520 |           |           | Aband. |
| CA           | 4/7/94    | 2160564    | 10/27/94  |           | Aband. |
| DE           | 4/7/94    | 949120273  | 1/31/96   | 0694074   | Lapsed |
| FI           | 4/7/94    | 954836     |           |           | Aband. |
| FR           | 4/7/94    | 949120273  | 1/31/96   | 0694074   | Lapsed |
| GB           | 4/7/94    | 949120273  | 1/31/96   | 0694074   | Aband. |
| IN           | 4/13/94   | 440DEL94   |           |           | Aband. |

|    |         |           |         |            |        |
|----|---------|-----------|---------|------------|--------|
| IT | 4/7/94  | 949120273 | 1/31/96 | 0694074    | Lapsed |
| JP | 4/7/94  | 52287394  | 9/24/96 | OP50888196 | Aband. |
| MX | 4/13/94 | 942657    |         |            | Aband. |
| NO | 4/7/94  | 954088    |         |            | Aband. |
| ZA | 4/12/94 | 942515    |         |            | Lapsed |

8. Title: **COPOLYMER PRODUCTION**  
 Inventor(s): **Anderson, et al.**  
 U.S. Patent No.: **5,264,546**  
 Issued: **November 23, 1993**  
 Status: **Lapsed**  
 Serial Nos.: **07/870,480**  
 Filed: **April 17, 1992**

| Country Code | App. Date | App. No.   | Pub. Date | Pub. No.  | Status |
|--------------|-----------|------------|-----------|-----------|--------|
| EP           |           | 903042679  | 11/7/90   | 0396289   | Lapsed |
| AT           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| AU           | 4/27/90   | 5452390    | 10/8/92   | 629632    | Lapsed |
| BE           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| BR           | 9/2/90    | PI90020600 |           |           | Aband. |
| CA           | 5/1/90    | 2015830    |           |           | Aband. |
| CH           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| DE           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| ES           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| FR           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Aband. |
| GB           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| IN           | 4/25/90   | 404DEL90   | 5/30/98   | 0396289   | Lapsed |
| IT           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| JP           | 5/2/90    | 11668590   | 2/28/91   | OP4708291 | Lapsed |
| KR           | 5/1/90    | 61931990   |           |           | Aband. |
| LU           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| MW           | 4/26/90   | MW4090     |           |           | Lapsed |
| NL           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| NZ           | 4/26/90   | 233,452    |           |           | Lapsed |
| SE           | 4/20/90   | 903042679  | 11/7/90   | 0396289   | Lapsed |
| TRAN         | 4/27/90   | 900038     |           |           | Lapsed |
| TW           | 5/15/90   | 79103931   | 10/1/91   |           | Lapsed |
| ZA           | 4/24/90   | 903108     |           |           | Lapsed |

9. Title: **COPOLYESTERS AND METHODS OF THEIR PRODUCTION**  
 Inventor(s): **Cox, et al.**  
 U.S. Patent No.: **5,977,291**  
 Issued: **November 2, 1999**  
 Status: **Issued**  
 Serial No.: **08/809,946**

Filed: September 21, 1995

| Country Code | App. Date | App. No.   | Pub. Date | Pub. No.      | Status |
|--------------|-----------|------------|-----------|---------------|--------|
| WO           | 9/21/95   | GB9502257  | 3/28/96   | WO9609402     | Filed  |
| EP           | 9/21/95   | 959321019  | 7/16/97   | 0783587       | Aband. |
| CA           | 9/21/95   | 2200473    |           |               | Aband. |
| FI           | 9/21/95   | 971199     |           |               | Aband. |
| GB           | 9/22/95   | 94190824   |           |               | Aband. |
| JP           | 9/21/95   | 51070096   | 6/16/98   | KOHYO50601298 | Aband. |
| KR           | 9/21/95   | 7018681997 |           |               | Aband. |
| MX           | 9/21/95   | 972206     | 12/1/97   |               | Aband. |
| NO           | 9/21/95   | 19971279   |           |               | Aband. |

10. Title: HV/HB COPOLYMER PRODUCTION

Inventor(s): Cox, et al.  
U.S. Patent No.: 6,080,562  
Issued: June 27, 2000  
Status: Issued  
Serial No.: 07/949,524  
Filed: May 24, 1991

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.  | Status  |
|--------------|-----------|-----------|-----------|-----------|---------|
| WO           | 10/19/92  | EP9100978 | 12/12/91  | WO9118995 | Filed   |
| EP           | 9/13/95   | 919102236 | 4/7/93    | 0535012   | Filed   |
| AT           | 5/24/91   | 919102236 | 4/7/93    | 0535012   | Lapsed  |
| AU           | 5/24/91   | 7970891   | 9/15/94   | 652942    | Lapsed  |
| CA           | 5/24/91   | 2083695   | 11/26/91  |           | Pending |
| DE           | 5/24/91   | 919102236 | 4/7/93    | 0535012   | Issued  |
| GB           | 5/24/91   | 919102236 | 4/7/93    | 0535012   | Issued  |
| IT           | 5/24/91   | 919102236 | 4/7/93    | 0535012   | Issued  |
| JP           | 5/24/91   | 50952491  |           |           | Pending |
| KR           | 5/24/91   | 70296892  |           |           | Aband.  |
| NL           | 5/24/91   | 919102236 | 4/7/93    | 0535012   | Lapsed  |

11. Title: ALIPHATIC POLYESTER COMPOSITION

Inventor(s): Lehrle, et al.  
U.S. Patent No.: 6,005,066  
Issued: December 21, 1999  
Status: Lapsed  
Serial No.: 08/768,030  
Filed: June 13, 1995

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.  | Status |
|--------------|-----------|-----------|-----------|-----------|--------|
| WO           | 6/13/95   | GB9501375 | 12/21/95  | WO9534599 | Filed  |
| EP           | 6/13/95   | 959244047 | 4/2/97    | 0765360   | Aband. |
| CA           | 6/13/95   | 2192688   |           |           | Aband. |

|    |         |          |        |               |        |
|----|---------|----------|--------|---------------|--------|
| GB | 6/13/94 | 94117926 |        |               | Aband. |
| JP | 6/13/95 | 50180096 | 5/6/98 | KOHYO50458398 | Aband. |

12. Title: **PROCESS OF RECOVERING POLYMERS OF HYDROXYALKANOIC ACIDS**

Inventor(s): **George, et al.**  
U.S. Patent No.: 5,952,460  
Issued: September 14, 1999  
Status: Lapsed  
Serial No.: 08/793,019  
Filed: August 15, 1995

| Country Code | App. Date | App. No.   | Pub. Date | Pub. No.  | Status |
|--------------|-----------|------------|-----------|-----------|--------|
| WO           | 8/15/95   | GB9501925  | 2/29/96   | WO9606178 | Filed  |
| EP           | 8/15/95   | 959278961  | 6/4/97    | 0776371   | Aband. |
| CA           | 8/15/95   | 2197782    |           |           | Aband. |
| FI           | 8/15/95   |            |           |           | Aband. |
| GB           | 8/18/94   | 94166915   |           |           | Aband. |
| JP           | 8/15/95   | 50784996   | 5/6/98    | 50445998  | Aband. |
| KR           | 8/15/95   | 7010621997 |           |           | Aband. |
| MX           | 8/15/95   | 971249     |           |           | Aband. |
| NO           | 8/15/95   | 19970738   |           |           | Aband. |

13. Title: **POLYESTER COMPOSITION**

Inventor(s): **Blanshard, et al.**  
U.S. Patent No.: 5,760,170  
Issued: June 2, 1998  
Status: Lapsed  
Serial No.: 08/809,316  
Filed: September 8, 1995

| Country Code | App. Date | App. No.   | Pub. Date | Pub. No.  | Status |
|--------------|-----------|------------|-----------|-----------|--------|
| WO           | 9/8/95    | GB9502150  | 3/14/96   | WO9607697 | Filed  |
| EP           | 9/8/95    | 959313016  | 6/25/97   | 0779910   | Aband. |
| CA           | 9/8/95    | 2199476    |           |           | Aband. |
| FI           | 9/8/95    | 970984     |           |           | Aband. |
| GB           | 9/9/94    | 94181740   |           |           | Aband. |
| JP           | 9/8/95    | 50932896   |           |           | Aband. |
| KR           | 9/8/95    | 7015671997 |           |           | Aband. |
| MX           | 9/8/95    | 971818     |           |           | Aband. |
| NO           | 9/8/95    | 971055     |           |           | Aband. |

14. Title: **STRUCTURE HAVING CONTROLLED WATER RESISTANCE**

Inventor: **Brunger**  
U.S. Patent No.: 5,560,962

Issued: October 1, 1996  
 Status: Lapsed  
 Serial No.: 08/204,263  
 Filed: November 11, 1992

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.   | Status |
|--------------|-----------|-----------|-----------|------------|--------|
| WO           | 11/11/92  | GB9202078 | 5/27/93   | WO9310308  | Filed  |
| EP           | 11/11/92  | 929229011 | 9/7/94    | 0613510    | Filed  |
| BE           | 11/11/92  | 929229011 | 9/7/94    | 0613510    | Lapsed |
| DE           | 11/11/92  | 929229011 | 9/7/94    | 0613510    | Lapsed |
| FR           | 11/11/92  | 929229011 | 9/7/94    | 0613510    | Lapsed |
| GB           | 11/11/92  | 929229011 | 9/7/94    | 0613510    | Lapsed |
| IT           | 11/11/92  | 929229011 | 9/7/94    | 0613510    | Lapsed |
| JP           | 11/11/92  | 50906593  | 2/2/95    | OP50110895 | Aband. |

15. Title: **PROCESS FOR THE MICROBIOLOGICAL PRODUCTION OF PHA POLYMERS**

Inventor(s): Naylor, et al.  
 U.S. Patent No.: 5,871,980  
 Issued: February 16, 1999  
 Status: Lapsed  
 Serial No.: 08/894,347  
 Filed: February 9, 1996

| Country Code | App. Date | App. No.  | Pub. Date | Pub. No.      | Status |
|--------------|-----------|-----------|-----------|---------------|--------|
| WO           | 2/9/96    | GB9600293 | 8/22/96   | WO9625509     | Filed  |
| EP           | 2/9/96    | 969019322 | 12/3/97   | 0809706       | Aband. |
| FI           | 8/15/97   | 973365    |           |               | Aband. |
| GB           | 2/17/95   | 95031746  |           |               | Aband. |
| JP           | 2/9/96    | 52474296  | 1/6/99    | KOHYO50000899 | Aband. |